



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,769	02/25/2002	Eivind Stenersen	758.1040USD1	3613

23552 7590 06/18/2003

MERCHANT & GOULD PC
P.O. BOX 2903
MINNEAPOLIS, MN 55402-0903

EXAMINER

SAVAGE, MATTHEW O

ART UNIT	PAPER NUMBER
----------	--------------

1723

DATE MAILED: 06/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/084,769

Applicant(s)

STENERSEN ET AL.

Examiner

Matthew O Savage

Art Unit

1723

-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 9 and 15-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) ☐ Other: _____

Applicant's election of group I and species 1 in Paper No. 5 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the limitation of the baffle plate thickness being no greater than 3.0 in. as recited in claim 13 lacks antecedent basis in the specification.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deibel.

With respect to claims 1 and 13, Deibel discloses a metal baffle plate 4 having an inlet arrangement 8 and an outlet arrangement 9, a metal can 1 having an interior and an average cross sectional thickness different than the baffle plate (see FIG. 1), the metal can being secured to the baffle plate along a laser welded seam 22 (see lines 12-13 and line 59 of col. 4), and a filter element 14 within the interior of the can. Deibel fails to specify the recited thickness of the baffle plate and can recited in claims 1 and 13,

however, such modifications would have been obvious in order to optimize the strength of the filter for a particular application (see *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977)).

As to claim 2, Deibel discloses the outlet arrangement as defining a tubular member 7 defining an outer annular surface, the filter element having a first end cap 11 and a media pack 14 secured to the first end cap.

Regarding claim 3, Deibel discloses a radially directed seal 10 between the first end cap and the outer annular surface of the tubular member.

Concerning claim 4, Deibel discloses the baffle plate as including an inner surface oriented within the can interior, and an opposite outer surface remote from the can interior, the baffle plate including a channel 5 in the outer surface for holding a seal member.

Regarding claim 14, Deibel discloses the baffle plate as having an outer annular surface with the laser welded seam 22 as being between the can and outer annular surface.

Claims 5-8, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deibel as applied to claim 4 above, and further in view of Oelschlaegel.

With respect to claim 5, Deibel discloses a first end cap that radially abuts the outer annular surface of the tubular member for form the radially directed seal but fails to specify a plurality of axially extending protrusions. Oelschlaegel discloses an analogous filter including a plurality of axially extending protrusions 99 and suggests

that such an arrangement ensures that a flow passage is provided between the end cap and filter housing. It would have been obvious to have modified the filter of Deibel so as to have the protrusions as suggested by Oelschlaegel in order to ensure that a flow passage is provided between the end cap and filter housing/baffle plate.

As to claim 6, Deibel discloses a second end cap 16 and an inner liner 13 with the media pack extending between the first and second end caps and the media pack circumscribing the inner liner.

Regarding claim 7, Deibel discloses a rigid structural member 13 oriented in the can interior and abutting an end of the can remote from the baffle plate and supporting the filter element.

Concerning claim 8, Deibel discloses the structural member as being secured to the second end cap 16.

With respect to claim 12, Deibel discloses a suitable filter medium potted within first and second end caps (see lines 4-5 of col. 5) but fails to specify pleated paper. Oelschlaegel discloses an analogous filter that includes pleated paper and teaches that such a media can be included to optimize the filter for a particular application (see lines 58-64 of col. 4). It would have been obvious to have modified the apparatus of Deibel so as to have included pleated paper as suggested by Oelschlaegel in order to optimize the apparatus for a particular application.

Claims 1-4, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 3-154606 in view of Deibel.

With respect to claims 1 and 13, '606 discloses a metal baffle plate 30' having an inlet arrangement 31 and an outlet arrangement 32, a metal can 10 having an interior and an average cross sectional thickness different than the baffle plate (see FIG. 2), the metal can being secured to the baffle plate along a welded seam 50 (see FIG. 5), and a filter element 20 within the interior of the can. '606 fail to specify a laser weld. Deibel discloses the concept of providing a laser weld 22 in an analogous filter and suggests that such a weld has improved aesthetics and bonding features (see lines 12-14 of col. 4). It would have been obvious to have modified the '606 filter so as to have included a laser weld as suggested by Deibel in order to provide a weld having improved aesthetics and bonding features. '606 and Deibel fail to specify the recited thickness of the baffle plate and can recited in claims 1 and 13, however, such modifications would have been obvious in order to optimize the strength of the filter for a particular application (see *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977)).

As to claim 2, '606 and Deibel disclose the outlet arrangement as defining a tubular member (see 33 of '606 and 7 of Deibel) defining an outer annular surface, the filter element having a first end cap (24 of '606 and 11 of Deibel) and a media pack (22 of '606 and 14 of Deibel) secured to the first end cap.

Regarding claim 3, '606 and Deibel disclose radially directed seals (43 of '606 and 10 of Deibel) between the first end cap and the outer annular surface of the tubular member.

Concerning claim 4, '606 and Deibel disclose the baffle plate as including an inner surface oriented within the can interior, and an opposite outer surface remote from

the can interior, the baffle plate including a channel (holding seal 41 of '606 and 5 of Deibel) in the outer surface for holding a seal member.

Regarding claim 14, both '606 and Deibel disclose the baffle plate as having an outer annular surface with the welded seam as being between the can and outer annular surface.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 3-154606 and Deibel as applied to claim 6 above, and further in view of Gewiss et al.

With respect to claim 11, '606 and Deibel fail to specify the second end cap as including a plurality of radially directed protrusions engaging an inner portion of the can, however, Gewiss et al disclose just such a feature 13 (see FIGS. 1-2). Gewiss et al teach that such structures center the filter element within the housing (see lines 66-68 of col. 2). It would have been obvious to have modified the combination suggested by '606 and Deibel so as to have included protrusions 13 as suggested by Gewiss et al in order to center the filter element within the filter housing.

Claims 5, 6, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 3-154606 in view of Deibel as applied to claim 4 above, and further in view of Oelschlaegel.

With respect to claim 5, '606 and Deibel disclose a first end cap that radially abuts the outer annular surface of the tubular member for form the radially directed seal but fail to specify a plurality of axially extending protrusions. Oelschlaegel discloses an

analogous filter including a plurality of axially extending protrusions 99 and suggests that such an arrangement ensures that a flow passage is provided between the end cap and filter housing. It would have been obvious to have modified the combination suggested by '606 and Deibel so as to have the protrusions as suggested by Oelschlaegel in order to ensure that a flow passage is provided between the end cap and filter housing/baffle plate.

As to claim 6, '606 discloses a second end cap 26 and an inner liner 21 with the media pack extending between the first and second end caps and the media pack circumscribing the inner liner.

With respect to claim 12, '606 and Deibel discloses a suitable filter medium potted within first and second end caps (see lines 4-5 of col. 5) but fail to specify pleated paper. Oelschlaegel discloses an analogous filter that includes pleated paper and teaches that such a media can be included to optimize the filter for a particular application (see lines 58-64 of col. 4). It would have been obvious to have modified the apparatus of Deibel so as to have included pleated paper as suggested by Oelschlaegel in order to optimize the apparatus for a particular application.

Claims 7, 8, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 3-154606 in view of Deibel and Oelschlaegelas applied to claim 6 above, and further in view of JP 9-133233.

Regarding claim 7, '606 discloses a structural member 13 oriented in the can interior and abutting an end of the can remote from the baffle plate and supporting the

filter element, but fails to specify a structural member that is rigid. '233 discloses a rigid structural member in an analogous filter element and suggests that such a member provides secure support for the filter element 13. It would have been obvious to have modified the filter suggested by '606, Deibel, and Oelschlaegelas so as to have included a rigid structural member as suggested by '233 in order to provide secure support for the filter element.

Concerning claim 8, '233 discloses the structural member as being secured to the second end cap 13a.

Regarding claim 10, '233 discloses the rigid structural member as including a bypass valve assembly 40.

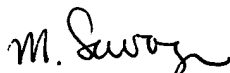
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew O Savage whose telephone number is 703-308-3854. The examiner can normally be reached on Monday-Friday, 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda W. Walker can be reached on 703-308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Application/Control Number: 10/084,769
Art Unit: 1723

Page 9


Matthew O Savage
Primary Examiner
Art Unit 1723

mos
June 13, 2003